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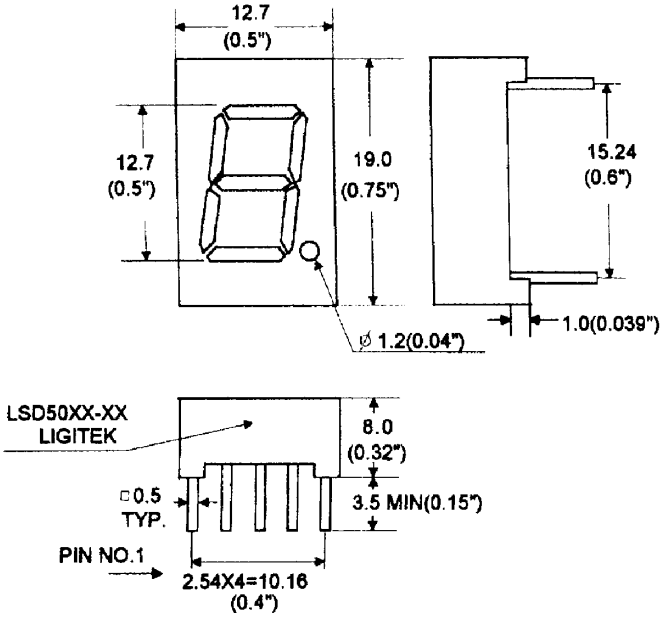
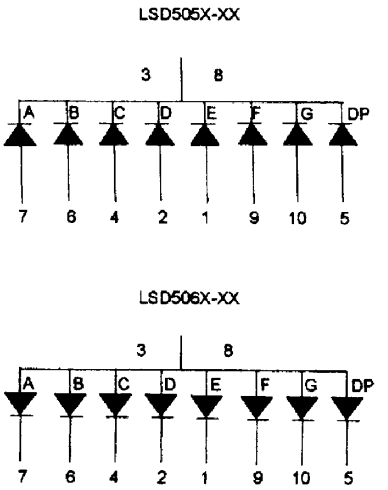
LIGITEK

SINGLE DIGIT LED DISPLAY (0.5Inch) LSD505X/6X series

PACKAGE DIMENSION



INTERNAL CIRCUIT DIAGRAM



NOTE: All Dimension Are In Millimeters And (Inch)
Tolerance Is ±0.25(0.01") Unless Otherwise Noted

- **Connection To Electrical Schematic**

Electrical Connection

PIN NO.	LSD505X-XX	PIN NO.	LSD506X-XX
1	Anode E	1	Cathode E
2	Anode D	2	Cathode D
3	Common Cathode	3	Common Andoe
4	Anode C	4	Cathode C
5	Andoe DP	5	Cathode DP
6	Andoe B	6	Cathode B
7	Andoe A	7	Cathode A
8	Common Cathode	8	Common Andoe
9	Andoe F	9	Cathode F
10	Andoe G	10	Cathode G

• Part Selection And Application Information (Ratings At 25°C Ambient)

PART NO	CHIP		common cathode or anode	λP (nm)	Δλ (nm)	Electrical					IV-M
						Vf(v)			Iv(mcd)		
	Material	Emitted				Min	Typ.	Max	Min	Typ.	
LSD5055-XX	GaAlAs	Red	Common Cathode	660	20	1.5	1.7	2.4	2.1	3.4	2:1
LSD5051-XX	GaP	Red		697	90	1.7	2.1	2.8	1.5	0.9	2:1
LSD5052-XX	GaP	Green		565	30	1.7	2.1	2.8	1.6	2.6	2:1
LSD5053-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.4	2.4	2:1
LSD5054-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.6	2.6	2:1
LSD5065-XX	GaAlAs	Red	Common Anode	660	20	1.5	1.7	2.4	2.1	3.4	2:1
LSD5061-XX	GaP	Red		697	90	1.7	2.1	2.8	1.5	0.9	2:1
LSD5062-XX	GaP	Green		565	30	1.7	2.1	2.8	1.6	2.6	2:1
LSD5063-XX	GaAsP/GaP	Yellow		585	35	1.7	2.0	2.8	1.4	2.4	2:1
LSD5064-XX	GaAsP/GaP	Orange		635	45	1.7	2.0	2.8	1.6	2.6	2:1

• Absolute Maximum Rating (Ta=25°C)

Parameter	Red			Green		Yellow			Orange		Unit	Remark
Forward Current Per Chip	SR		H		G		Y			E		
	40		15		30		20			30	mA	
Peak Current Per Chip (Duty 1/10, 0.1MS Pulse Width)	200		60		120		80			120	mA	
Power Dissipation Per Chip	110		45	100		85			100		mW	
Derating Linear From 25°C Per Chip	0.45		0.25	0.45		0.45			0.45		mA/ °C	
Reverse Current Per Any Chip	10			10		10			10		μA	
Operating Temperature	-40°C TO +85°C											
Storage Temperature	-40°C TO +100°C											

Solder Temperature 1/16 Inch Below Seating Plane For 3 Seconds At 260°C

• Test Condition For Each Parameter

Parameter	Symbol	Unit	Test Condition
Forward Voltage Per Chip	Vf	volt	If=20mA
Luminous Intensity Per Chip	Iv	mcd	If=10mA
Peak Emission Wavelength	λP	nm	If=20mA
Spectral Line Half-Width	Δλ	nm	If=20mA
Reverse Current Any Chip	Ir	μA	Vr=5V
Luminous Intensity Matching Ratio	IV-M		